

ABSTRACT OF THE DISCLOSURE

A probe for detecting light or irradiating light comprises a cantilever supported at an end thereof by a substrate, a hollow tip formed at a free 5 end of the cantilever, a microaperture formed at the end of the tip, and a hollow waveguide formed inside the cantilever.

A method for producing a probe for light detection or light irradiation which comprises the 10 steps of working a substrate to form a groove therein, forming a flat plate-shaped cover portion on the groove to form a hollow waveguide having an opening in a part thereof, forming a hollow tip having a microaperture on the opening, and removing a part of the substrate by 15 etching, to form a cantilever.

TOP SECRET - DEFENSE